

AMENDMENTS TO THE DRAWINGS:

The attached sheet of a drawing includes changes to the legend.

Attachments: Replacement Sheet 2/11 showing Figure 3.

REMARKS

In the Office Action, the Examiner objected to Figure 3 of the drawing under 37 C.F.R. 1.121(d) and to claims 4, 6-14, and 17 under 37 C.F.R. 1.75(c) as being multiply dependent claims. The Examiner rejected claims 1-3 and 5 under 35 U.S.C. § 103(a) over Rich et al. (U.S. Patent No. 5,063,293); and rejected claim 15 under 35 U.S.C. 102(b) as unpatentable over Rich et al.

Claims 1, 3-9, 11, 12, 14, 16, and 17 have been amended. Claim 15 has been cancelled rendering the Examiner's objection to claim 15 moot. Claims 1-14, 16, and 17 are pending. Applicants respectfully traverse the rejection of claims 1-3 and 5.

Claims 4, 6-9, 11, 12, 14, and 17 have been amended as required by the Examiner. Accordingly, Applicants request that the Examiner withdraw the objection under 37 C.F.R. 1.75(c).

In light of the aforementioned amendments, Applicants respectfully submit that claims 10 and 13 do not have an objectionable form under 37 C.F.R. 1.75(c) and accordingly request that the Examiner withdraw the objection. The Examiner did not specifically reject or allow claim 16, however, it has been amended to reflect its dependency.

Claim 1 has been amended to more clearly set forth the nature of the invention. Claims 3 and 5 have been amended to reflect their respective dependence on claims 1 and 4.

Figure 3 has been labeled as "Prior Art," as required by the Examiner. Applicants respectfully request the Examiner withdrawal the objection under 37 C.F.R. 1.121(d).

The Examiner rejected claims 1-3 and 5 under 35 U.S.C. § 103(a) over Rich et al. Applicants respectfully traverse this rejection.

From the onset, Applicants object to form of the Examiner's rejection. To the extent the Examiner's argument is understood, the Examiner appears to take Official Notice that it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a protection means element because Rich et al. discloses a "titanium window, which is know in the art for having a relatively high resistance to heat." Office Action at 4. Applicants disagree with this assertion, since disclosing a type of material is not a suggestion or motivation to create a protection means. Further, if the Examiner intends to take Office Notice, then Applicants request that the Examiner cite references in support of the Examiner's assertion or provide an affidavit if it is within the Examiner's personal knowledge, as discussed in MPEP § 2144.03. Moreover, Applicants note that the Examiner has not specifically asserted which element of Rich et al. corresponds to the alleged heating element. For at least this reason, the rejection is improper and claim 1 is allowable.

Applicants also submit that the cited prior art fails to establish a *prima facie* case of obviousness, for which three basic criteria must be satisfied. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine references. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all of the claim elements. See M.P.E.P. § 2143. Moreover, the requisite teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be

found in the prior art, not in Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See M.P.E.P. § 706.02(j). Applicants submit that the cited prior art does not disclose each and every element of claim 1.

With regard to the rejection of claim 1, the Examiner states that "Rich further discloses . . . [a] heating means for heating the moderator, but failed to clearly show," a protection means. Office Action at 4. Applicants disagree.

To the extent that the Examiner's argument is understood, the Examiner appears to assert that Rich et al. discloses a "thermalizing system for receiving high energy positrons," and such as system constitutes a heating means. However, the thermalization system of Rich et al. is not a heating element, as the thermalization refers to the energetic distribution of the positrons which are received by the moderator. Thus, Rich et al. does not disclose a heating means.

By the Examiner's own admission (Office Action at 4), Rich et al. does not disclose a protection means as recited in claim 1. Further, the Examiner's contention that a protection means is obvious given the disclose of Rich et al. is improper for the reasons discussed above.

For at least these reasons, no *prima facie* case of obviousness has been established for claim 1, and claim 1 is allowable. Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 1 under 35 U.S.C. § 103.

Independent claim 1 is allowable for at least the reasons given above. Further, all other pending claims 2-14, 16, and 17 depend from claim 1 and are allowable for at least this reason.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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